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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,087	08/02/2001	Edward Ho	790002-2001	6775
20999 7590 12/30/2003				
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151				
EXAMINER NASRI, JAVAID H				
ART UNIT		PAPER NUMBER		

2839

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/921,087

Applicant(s)

HO, EDWARD

Examiner

Javaid Nasri

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7-12 and 17-61 is/are rejected.
- 7) ☒ Claim(s) 4 and 13-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. The indicated allowability of claims is withdrawn in view of the newly discovered reference. Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 36, 41 and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by

Daniel (4,241,382).

Daniel discloses a spherical lens (see col. 9, lines 28-41) including a surface having a spherical curvature and an optical transmission medium placed at a center of the spherical curvature of the spherical lens, the lens directs at least a portion of the light into the optical transmission medium, light fixtures, (see abstract).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5, 7-12, 17-23 and 25-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniel (4,529,830, cited in previous office action) in view of Daniel (4,241,382).

Daniel discloses a lens (5, 7) including a surface having a spherical curvature and an optical transmission medium (8) placed at a center of the spherical curvature (see figure 1A), the lens directs at least a portion of the light into the optical transmission medium, a connector (9), the attachment assembly and the lens are integrated as a single unit, optical fiber (44), predetermined index of refraction, outer and inner layers, a controller (see col. 12, lines 48-63), the output includes a wavelength of the directed light, energy converter (see abstract), lighting apparatus, thermal photovoltaic cell (1), light absorbing medium, electricity generator (see abstract), energy storage element, a fixed focal point, the optical transmission medium overlaps the focal point, light collector, a convex surface, fresnel surface (11), light collector and lens are integrated as a single unit, a conical shape (6), frustum of a cone (6), reflective surface, lighting fixtures (322, 348), natural light.

However, Daniel (4,529,830) does not disclose:

- a) A spherical lens. Daniel (4,241,382) discloses that the lens could be a spherical lens (see col. 9, lines 28-41), therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to modify Daniel (4,529,830) so that to have a spherical lens in view of Daniel (4,241,382) for better collection of light.

- b) the predetermined index of refraction is approximately 1.49 and 1.39 and the material is acrylic and pyrex glass respectively. Official notice is taken that lens material acrylic with refractive index 1.49 and pyrex with refractive index 1.39 are well known in the art, therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention for the material of Daniel to be acrylic with refractive index 1.49 and pyrex with refractive index 1.39 for improved refractive index.

6. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daniel (4,529,830, cited in previous office action) in view of Daniel (4,241,382) as applied to claims 1, 21 and 23 above, and further in view of Bauer (cited in previous office action).

Daniel (4,529,830, cited in previous office action) in view of Daniel (4,241,382) discloses all the limitations of claims 1, 21 and 23 as shown above,

However, Daniel does not disclose:

- a) the light absorbing medium includes carbon particles. Bauer discloses carbon particles as being used as light absorbing medium, therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention for Daniel (4,529,830, cited in previous office action) in view of Daniel (4,241,382) to have the light absorbing medium includes carbon particles in view of Bauer in order to have better light absorbing medium.

*Allowable Subject Matter*

7. Claims 4 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**REASONS FOR ALLOWANCE**

8. The following is an examiner's statement of reasons for allowance:

The reason for allowance of the claims is the inclusion of the limitation,

- a) for claim 4, a pivoting element for adjusting the optical transmission medium to the lens, in combination with other limitations in the claim which is not found in the prior art reference of record.
- b) for claim 13, an interface between the outer layer and the inner layer includes a second spherical curvature, in combination with other limitations in the claim which is not found in the prior art reference of record.
- c) for claim 16, an index of refraction of the outer layer material is less than an index of refraction of the inner layer material, in combination with other limitations in the claim which is not found in the prior art reference of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Contact***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javaid Nasri whose telephone number is 703 308 5876. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 703 308 2710. The fax phone number for the organization where this application or proceeding is assigned is 703 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

**Any correspondence to this action may be mailed to:**

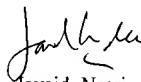
**Commissioner for Patents  
Post Office Box 1450  
Alexandria, VA 22313-1450**

For additional information regarding this new address, which was effective May 1, 2003, see *Correspondence with the United States Patent and Trademark Office, 68 Fed. Reg. 14332 (March 25, 2003)*.

**Or faxed to:** 703-308-7722 or 308-7724 (informal or draft communications should be clearly labeled "PROPOSED" or "DRAFT")

**Hand-delivered responses should be brought to:**

**Crystal Plaza 4, Fourth Floor (receptionist)  
2201 South Clark Place, Arlington, Virginia**

  
Javaid Nasri

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Art Unit: 2839

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JN

Primary Examiner  
Art Unit 2839

Jhn  
December 17, 2003